

DESCRIPTIONS OF NEW SPECIES OF LAND SHELLS FROM
AFRICA.

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PLATES XV-XVII.

I HAVE lately received the following new species and sub-species among a large number of well-known African land shells. Most of them were collected in German East Africa, two in Togo, one in Southern Cameroons, and one in Southern Abyssinia. I received them through the kindness of Mr. P. Hesse, Venice (No. 6), Mr. Naegele, Waltersweier, near Offenburg (Nos. 3, 4, 5, 8, 9, 10, 12, 13), Mr. H. Rolle, Berlin (No. 7), and Mr. M. Stahlberg, Schwerin (Nos. 1, 2, 11). I have to thank Dr. L. Germain, of Paris, for having kindly examined Nos. 1, 2, 6, 9, 11; also Mr. E. A. Smith, who informed me that No. 1 was not in the British Museum. The types are in my collection, excepting that of *Ligatella Letourneui* Bourg., var. *intermedia*, nov. var., which has been presented to the Senckenberg Museum, Frankfurt (M.).

1. *TROCHONANINA* GERMAINI, n.sp. Pl. XV, Figs. 1-3.

Testa perforata, applanata, distinctissime carinata, linea impressa indistinctissima supra et distincta sub carinam, supra corneo-fusca, infra cornea et nitens, supra sericea, propter costulas angustas, basin versus evanescentes. Anfractus $6\frac{1}{2}$, plani, regulariter accrescentes, sutura plana separati; ultimus non descendens. Apertura angulato-ovata, obliqua; peristoma simplex, acutum, marginibus callo tenui junctis. Alt. 10 mm.; diam. maj. 24.5, min. 22 mm.; apertura, alt. 12, lat. 9 mm.

Hab.—Harrar, Southern Abyssinia.

Shell perforate, flattened, very sharply keeled, the keel bordered above by a very indistinct line, and below by a distinct impressed line; corneous brown above and corneous below, glossy below, above with a silky lustre, caused by narrow, fine riblets, which become very indistinct on the underside. Whorls $6\frac{1}{2}$, flat, regularly increasing in size, separated by a flat suture; the last whorl not descending in front; aperture angulate-ovate, oblique; peristome simple, acute, the margins united by a very thin callus.

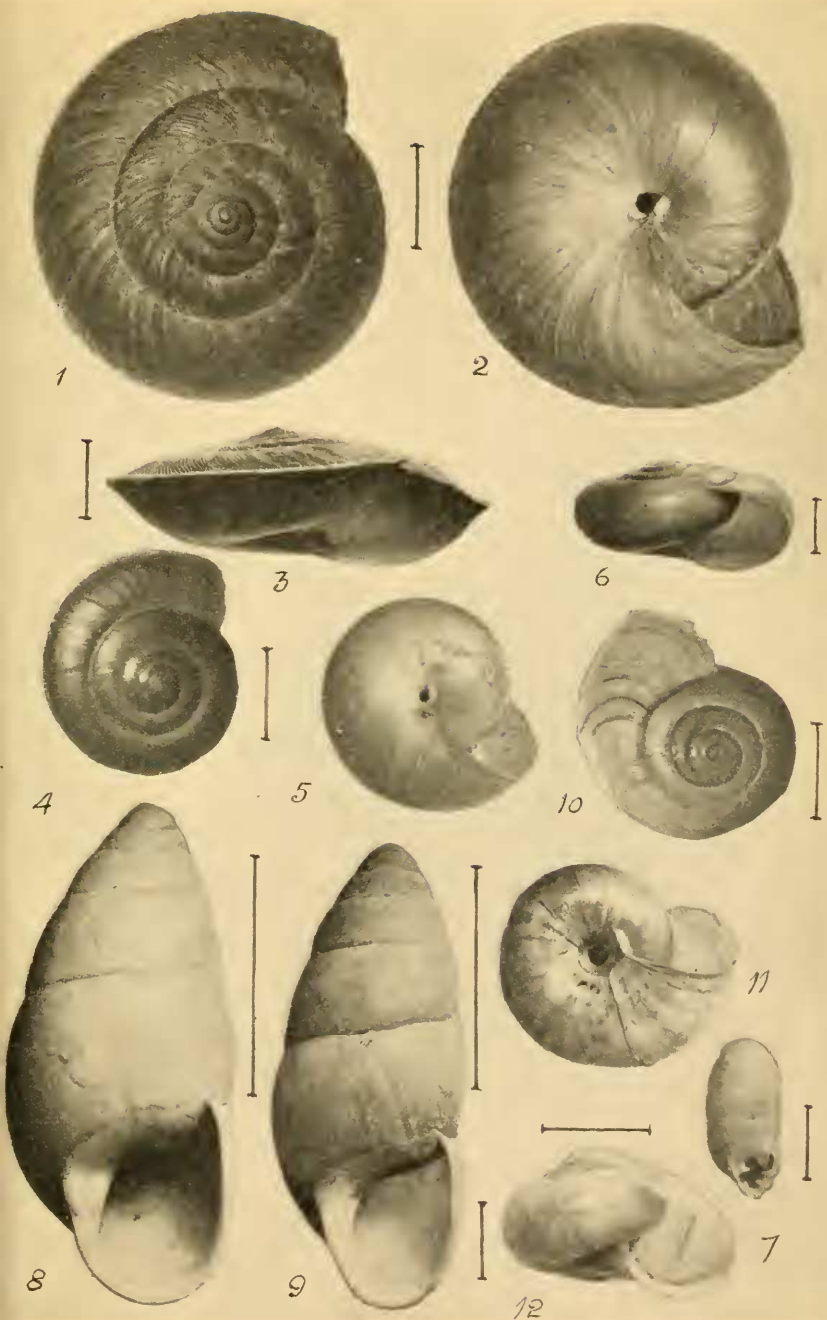
This pretty new *Trochonanina* is related to *T. Nyassana*, E. A. Smith, but is easily distinguished by its flatter shape. I received this species from Mr. M. Stahlberg, Schwerin. I have the honour of connecting with it the name of Dr. L. Germain, Assistant of the Muséum d'Histoire naturelle at Paris.

2. *THAPSIA* CALAMICHRUA, JON., var. *DEPRESSA*, n.var.

Pl. XV, Figs. 4-6.

Differt a typo spira depressa. Alt. 7 mm.; diam. maj. 14, min. 12 mm.; apertura, alt. 8, lat. 6 mm.

Hab.—Atakpame, Central Togo.



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This new sub-species of the widely distributed *Thapsia calamichroa*, Jon., differs from the type in having a more depressed spire and being therefore flatter. I received this fine shell from Mr. M. Stahlberg, Schwerin.

3. ENNEA (GULELLA) QUINQUEDENTATA, n.sp. Pl. XV, Fig. 7.

Testa rimata, pupiformis, lævis, non costata; apex obtusus. Anfractus 8, convexiusculi, regulariter et leniter accrescentes, sutura subplana, prope aperturam ascendente, separati; ultimus circa $\frac{2}{3}$ longitudinis totius æquans. Apertura subverticalis, pyriformis, quinquedentata; dente uno lamelliforme parietali, uno columellari, uno ad basin marginis columellaris, duobus ad marginem basalem; peristoma tenue, reflexum, marginibus callo tenuissimo junctis. Long. 10, diam. 5 mm.; apertura, alt. 3, lat. 2.5 mm.

Hab.—Kipatimu, German East Africa.

Shell rimate, pupiform, smooth, without ribs; apex obtuse; whorls 8, moderately convex, regularly and slowly increasing in size, separated by an almost flat suture, which somewhat ascends near the aperture, the last whorl measuring about $\frac{2}{3}$ of the length of the shell; aperture nearly vertical, pyriform, with 5 teeth; one lamelliform on the parietal margin, one on the columellar margin, one at the base of the columellar lip, and two on the basal margin; peristome thin, reflexed, the margins united by a very thin callus. I received this new *Ennea* from Mr. G. Naegele.

4. EDENTULINA AFFINIS, n.sp. Pl. XV, Fig. 8.

Testa perforata, oblonga, oviformis, obtusa, albescens, nitens. Anfractus 7, moderate convexi, sutura subplana, prope aperturam ascendenti, infra linea impressa sculpta, separati; ultimus circiter $\frac{1}{3}$ longitudinis totius æquans. Apertura ovata, intus alba; peristoma crassum, reflexum, marginibus callo distincto junctis. Long. 31.5, diam. 15 mm.; apertura, alt. 13, lat. 10 mm.

Hab.—Kipatimu, German East Africa.

Shell perforate, oblong, oviform, obtuse above, whitish, glossy. Whorls 7, very moderately convex, separated by an almost flat suture, which ascends near the aperture and is bordered below by an impressed line; the last whorl measuring about one-third the length of the shell. Aperture ovate, white within; peristome thickened, reflexed, the margins united by a distinct callus.

Var. GRACILIS. Pl. XV, Fig. 9.

Differt a typo testa graciliore. Long. 30, diam. 12.5 mm.; apertura, alt. 12, lat. 7.5 mm.

Hab.—Kipatimu, German East Africa.

This new variety differs from the type by its slender shape.

Edentula affinis is most closely related to the variable *Edentulina ovoidea*, Brug., but can easily be distinguished from that species by its smaller size and flatter whorls. It is also rather more perforate, and has a flatter suture which does not ascend so much at the

aperture. This new species and the var. *gracilis* are due to the zeal of Mr. G. Naegele.

5. *GONAXIS HELICOIDES*, n.sp. Pl. XV, Figs. 10–12.

Testa perforata, subsolida, luride lactea, supra anguste costulato-striata, infra laevis, nitens. Anfractus 7, convexiusculi, sutura plana separati; ultimus celeriter accrescens, antice non descendens, supra sulco superficiale impressus. Apertura ovata, obliqua, margine superiore in lobum producto; peristoma moderate incrassatum, subreflexum, marginibus callo tenuissimo junctis. Alt. 10 mm.; diam. maj. 14.5, min. 12 mm.; apertura, alt. 8, lat. 7 mm.

Hab.—Kipatimu, German East Africa.

Shell perforate, not very thick, but solid, dirty milky white, closely costulately striated on the upper sides, smooth and shining below. Whorls 7, moderately convex, separated by a flat suture; the last whorl rapidly increasing in size, not descending in front, furnished on the upper side with a very low furrow. Aperture ovate, oblique, its upper margin produced; peristome somewhat thickened, moderately reflexed, the margins united by a very thin callus.

Mr. G. Naegele has kindly sent me this characteristic new *Gonaxis*.

6. *ACHATINA HESSEI*, n.sp. Pl. XVII, Fig. 1.

Testa imperforata, fusiforme ovata, brunnea; anfractus superiores flammulis brunneis indistinctis, in anfractu ultimo evanescentibus, ornati; anfractus ultimus praecedentibus saturatius coloratus; apex albescens. Superficies subnitens, granulis distinctissimis, sulcis spiralibus longitudinalibusque valde incisus induta. Anfractus 8, moderate convexi, regulariter accrescentes, sutura subplana separati; ultimus subconvexus, $\frac{1}{2}$ longitudinis totius aequans. Apertura ovata, intus alba, colore externo translucente; peristoma simplex, acutum; margo columellaris albescens, cum basali angulum formans. Long. 128, diam. 64 mm.; apertura, alt. 71, lat. 37 mm.

Hab.—Yaunde, Southern Cameroons.

Shell imperforate, fusiform-ovate, of a chestnut colour; the upper whorls painted with very indistinct darker chestnut stripes, which disappear on the last whorl, which is somewhat darker-coloured than the preceding; apex whitish. Surface nearly lustreless, furnished with strong granules, produced by deeply-cut spiral and longitudinal furrows. Whorls 8, very moderately convex, regularly increasing in size, separated by an almost flat suture; the last whorl somewhat convex, measuring about one-half of the shell. Aperture ovate, white within, displaying the external colour; peristome simple, acute; the margin of the whitish columella forming an angle with the basal margin.

This pretty *Achatina* is related to *A. balteata*, Rve., but is distinctly separated from that species by its very different sculpture, which recalls the granulation of *A. reticulata*, Pfr. *A. Hessei* is named in honour of Mr. P. Hesse, from whom I received this new species.



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